REMARKS

The specification has been amended to include a reference to the priority applications.

The above amendments to the claims have been made to meet the requirements of the USPTO.

A replacement Abstract is supplied on a separate sheet.

No fee is believed to have been incurred by virtue of this amendment. However if a fee is incurred on the basis of this amendment, please charge such fee against deposit account 07-0832.

Respectfully submitted,
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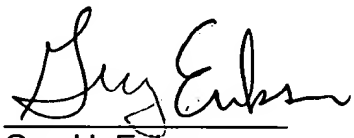

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What is claimed is:

1. Method of movement estimation for a sequence of images including segmentation of a current video image into image blocks, movement estimation per image block in order to obtain a movement vector field for said current image, a stage of reassignment of a vector to a block by selecting one movement vector from among N predominant vectors, wherein the predominant vectors are the ones of the group of vectors belonging to the movement vector field of said current image and at least to the movement vector field of a preceding image, the vectors being scaled according to the temporal distance to which they correspond.

2. Method according to Claim 1, wherein, for a predominant vector, second-order regional maxima are detected so as not to be taken into account during the selection of the other predominant vectors.

3. Method according to Claim 1, wherein the predominant vectors are selected in each of the four directions.

4. Method according to Claim 1, wherein the selection of the reassigned vector is based on the value of the displaced frame difference (DFD).

5. Method according to Claim 4, wherein, if the DFDs associated with the N predominant vectors are greater than the DFD associated with the original vector, the zero vector is adopted.

6. Method according to Claim 4, wherein, if the DFDs associated with the N predominant vectors are greater than the weighted DFD associated with the original vector, the original vector is kept.

7. Method according to Claim 1, wherein the selection of the reassigned vector is based on the calculation of the activity (spatial gradient) in the inter-image difference block (current block -estimated block).

8. Method according to Claim 7, wherein, if the activities corresponding to the N predominant vectors are greater than the activity corresponding to the original vector, the zero vector is adopted.

9. Method according to Claim 7, wherein, if the activities corresponding to the N predominant vectors are greater than the weighted activity corresponding to the original vector, the original vector is kept.

10. Method according to Claim 4, wherein the components of the vectors used during the DFD calculations are the spatially filtered components.

11. Method according to Claim 7, wherein the components of the vectors used during the spatial-gradient calculations are the spatially filtered components.

12. Method according to Claim 1, wherein the vectors of the preceding images, in addition to being scaled, are weighted as a function of the temporal distance.

13. Method according to Claim 1, wherein, when a break in movement is detected, the vectors of the preceding images are not considered.

ABSTRACT

The method includes segmentation of the video image into image blocks, movement estimation per image block in order to obtain a field of movement vectors. It is characterized in that it includes a stage of reassignment of a vector to a block by selecting one movement vector from among N predominant vectors belonging to the field of vectors.

The applications relate to movement estimation, for example, by image-block matching.